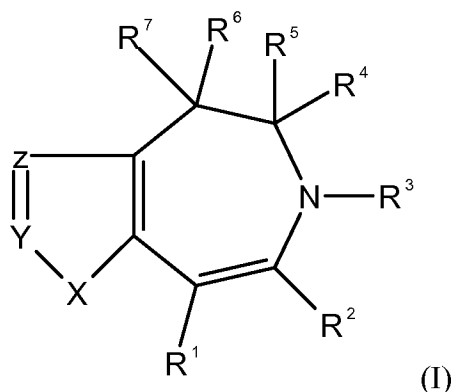


Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A compound having the formula (I):



wherein:

X is NR^9 , O or $\text{S}(\text{O})_t$ (where t is 0 to 2);

Y is CR^{30} or N;

Z is CR^{31} or N;

R^{30} and R^{31} are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-\text{OR}^{32}$, $-\text{SR}^{32}$, $-\text{N}(\text{R}^{33})\text{R}^{34}$, $-\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{R}^{34}$, $-\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{C}(\text{O})\text{R}^{36}$, $-\text{C}(\text{O})\text{OR}^{32}$, $-\text{C}(\text{S})\text{OR}^{32}$, $-\text{C}(\text{O})\text{SR}^{32}$, $-\text{C}(\text{O})\text{N}(\text{R}^{33})\text{R}^{34}$, $-\text{C}(\text{S})\text{N}(\text{R}^{33})\text{R}^{34}$, $-\text{C}(\text{O})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{C}(\text{S})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{C}(\text{O})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{R}^{34}$, $-\text{C}(\text{S})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{R}^{34}$ and $-\text{C}(\text{O})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$; or

R^{30} and R^{31} together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally

substituted heteroaryl ring, or optionally substituted aryl with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above,

R^1 and R^2 are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-OR^{14}$, $-SR^{14}$, $-N(R^{15})R^{16}$, $-N(R^{15})S(O)_2R^{23}$, $-N(R^{17})N(R^{15})R^{16}$, $-N(R^{17})N(R^{15})S(O)_2R^{23}$, $-C(O)R^{18}$, $-C(O)OR^{14}$, $-C(S)OR^{14}$, $-C(O)SR^{14}$, $-C(O)N(R^{15})R^{16}$, $-C(O)N(R^{15})S(O)_2R^{23}$, $-C(O)N(R^{15})N=R^{16}$, $-C(O)N(R^{17})N(R^{15})R^{16}$ and $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$;

R^3 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted heteroaralkyl, $-C(O)R^{10}$, $-C(O)OR^{10}$, $-S(O)_2R^{10}$, $-C(O)N(R^{11})R^{12}$, $-C(O)N(R^{11})S(O)_2R^{23}$, $-C(O)N(R^{13})N(R^{11})R^{12}$, $-C(O)N(R^{13})N(R^{11})S(O)_2R^{23}$, $-N(R^{13})C(O)R^{10}$, $-N(R^{13})C(O)N(R^{11})R^{12}$, $-N(R^{13})C(O)N(R^{11})S(O)_2R^{23}$, $-N(R^{10})C(O)N(R^{13})N(R^{11})R^{12}$, $-N(R^{10})C(O)N(R^{13})N(R^{11})S(O)_2R^{23}$, $-N(R^{13})C(O)OR^{10}$, $-P(O)OR^{10}$, or $-P(O)(OR^{19})OR^{12}$;

R^4 , R^5 , R^6 and R^7 are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-OR^{14}$, $-SR^{14}$, $-S(O)_2R^{14}$,

-N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁵)C(O)R²³, -C(O)R¹⁸, -C(O)OR²⁰, -C(O)N(R²¹)R²², -C(O)N(R²¹)S(O)₂R²³; -C(O)N(R²⁴)N(R²¹)R²² and -C(O)N(R²⁴)N(R²¹)S(O)₂R²³; or

R⁶ and R⁷ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁴ and R⁵ are as described above; or

R⁴ and R⁵ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁴ and R⁵, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁶ and R⁷ are as described above; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁴ and R⁵, together with the carbon atom to which they are attached, and R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring or an optionally substituted cycloalkenyl ring;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸, -C(O)OR²⁰ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted

heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, ~~R¹⁵~~, ~~R¹⁶~~, R¹⁷ and R¹⁸ are selected as in (a) above;

R²⁰, R²¹, R²² and R²⁴ are selected as in (a) or (b) as follows: (a) R²⁰, R²¹, R²² and R²⁴ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R²¹ and R²², together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of ~~R²⁰~~, ~~R²¹~~, ~~R²²~~ and R²⁴ are selected as in (a) above;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, ~~R⁸~~, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, and R²⁴ and R³⁰, R³¹, R³², R³³, R³⁴, R³⁵ and R³⁶, when substituted, are substituted with one or more substituents, each independently selected from Q¹;

each Q¹ is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyno, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), ~~N⁺(R⁷⁷)₃~~, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q¹ groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q^1 is independently substituted or unsubstituted with one or more substituents each independently selected from Q^2 ;

each Q^2 is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyno, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, $-OR^{70}$, $-SR^{70}$, $-R^{60}-C(J)R^{71}$, $-R^{60}-N(R^{70})C(J)R^{71}$, $-OC(O)R^{71}$, $-R^{60}-N(R^{75})(R^{76})$, $-N^+(R^{77})_3$, $-P(R^{78})_2$, $-P(O)(R^{78})_2$, $-OP(O)(R^{78})_2$, $-N(R^{70})S(O)_2R^{71}$, $-S(O)_2R^{71}$, $-S(O)R^{82}$, $-OS(O)R^{83}$, $-OS(O)_2R^{83}$ or $-Si(R^{83})_3$;

two Q^2 groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or $-NR^{70}$;

each R^{60} is independently a direct bond or alkylene;

each R^{70} is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R^{71} is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, $-OR^{72}$ or $-N(R^{73})R^{74}$;

R^{72} , R^{73} and R^{74} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{73} and R^{74} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R^{75} and R^{76} are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

R^{75} and R^{76} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

each R^{77} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R^{78} is alkyl, heteroaryl, heterocyclyl, aryl, $-OR^{79}$ or $-N(R^{80})R^{81}$;

R^{79} is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R^{80} and R^{81} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{80} and R^{81} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R^{82} is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or $-OR^{83}$; and

each R^{83} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; or as a pharmaceutically acceptable salt thereof.

2. (Previously presented) A compound of claim 1, wherein:

R^1 is $-C(O)R^{18}$, $-C(O)OR^{14}$, $-C(S)OR^{14}$, $-C(O)SR^{14}$, $-C(O)N(R^{15})R^{16}$, $-C(O)N(R^{15})S(O)_2R^{23}$, $-C(O)N(R^{15})N=R^{16}$, $-C(O)N(R^{17})N(R^{15})R^{16}$ or $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$.

3. (Previously presented) The compound of claim 2, wherein R^3 is $-C(O)R^{10}$, $-C(O)OR^{10}$, $-S(O)_2R^{10}$ or $-C(O)N(R^{11})R^{12}$.

4. (Original) The compound of claim 3 wherein R^2 is hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl or optionally substituted alkynyl.

5. (Original) The compound of Claim 4 wherein R^4 , R^5 , R^6 and R^7 are selected from a), b), c), d), e), f), g), h) and i) below:

a) R^4 and R^5 are each independently hydrogen or halo and R^6 and R^7 are optionally substituted alkyl;

b) R^6 and R^7 are each independently hydrogen or halo and R^4 and R^5 are optionally substituted alkyl;

c) R^4 , R^5 , R^6 and R^7 are each optionally substituted alkyl;

d) R^4 and R^5 are each independently hydrogen or halo and

R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring.

e) R^4 and R^5 are optionally substituted alkyl and R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring

f) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R^6 and R^7 are each independently hydrogen or halo;

g) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R^6 and R^7 are optionally substituted alkyl;

h) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring and R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring; and

i) R^4 , R^5 , R^6 and R^7 are each independently hydrogen or halo.

6. (Original) The compound of claim 5 wherein:

Y is CR^{30} ; and

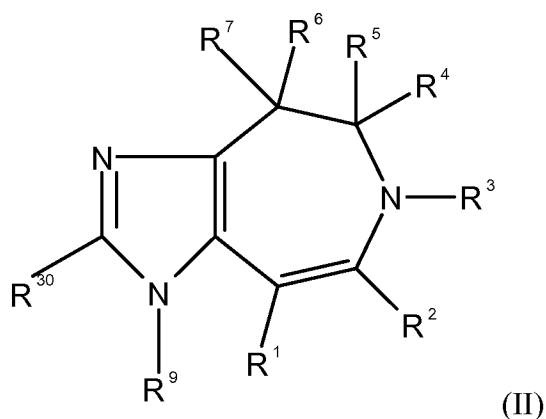
R^{30} is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-OR^{32}$, $-SR^{32}$, $-N(R^{33})R^{34}$, $-N(R^{33})S(O)_2R^{23}$, $-N(R^{35})N(R^{33})R^{34}$, $-N(R^{35})N(R^{33})S(O)_2R^{23}$, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ or $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl,

optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

7. (Previously presented) A compound of claim 6 having the formula (II):



or a pharmaceutically acceptable salts, ~~esters, enol ethers, enol esters, acetals, ketals, orthoesters, hemiacetals, hemiketals, acids, and bases, thereof~~ thereof, wherein:

R^1 is $-C(O)OR^{14}$; $-C(S)OR^{14}$, $-C(O)SR^{14}$, $-C(O)N(R^{15})R^{16}$, $-C(O)N(R^{15})S(O)_2R^{23}$, $-C(O)N(R^{15})N=R^{16}$, $-C(O)N(R^{17})N(R^{15})R^{16}$ and $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$;

R^2 is hydrogen, halo or optionally substituted alkyl;

R^3 is $-C(O)R^{10}$;

R^4 and R^5 are each independently hydrogen or halo; or

R^4 and R^5 are each optionally substituted alkyl;

R^6 and R^7 are each independently hydrogen or halo; or

R^6 and R^7 are each optionally substituted alkyl; or

R⁶ and R⁷ together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring or an optionally substituted cycloalkenyl ring;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸, or -S(O)₂R²³;

R¹⁰ is an optionally substituted aryl or an optionally substituted heteroaryl;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

R³⁰ is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, -OR³², -SR³², -N(R³³)R³⁴, -N(R³³)S(O)₂R²³, -N(R³⁵)N(R³³)R³⁴, -N(R³⁵)N(R³³)S(O)₂R²³, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ or -C(O)N(R³⁵)N(R³³)S(O)₂R²³.

8. (Original) The compound of Claim 7 wherein:

R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo; and

R³⁰ is selected from the group consisting of hydrogen, halo, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl,

optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

9. (Original) The compound of Claim 8 wherein said compound is

6-(4-fluoro-benzoyl)-3,6,7,8-tetrahydro-imidazo[4,5-d] azepine-4-carboxylic acid ethyl ester.

10. (Original) The compound of Claim 7 wherein:

R^4 and R^5 are each independently hydrogen or halo; and

R^6 and R^7 are optionally substituted alkyl; or

R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

11. (Original) The compound of Claim 10 wherein

R^2 is hydrogen, halo or optionally substituted alkyl; and

R^9 is hydrogen.

12. (Original) The compound of Claim 11 wherein R^{30} is selected from the group consisting of $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

13. (Currently amended) The compound of Claim 12 wherein R^1 is $-C(O)OCH_2CH_3$, $-C(O)OCH_3$, $-C(O)OCH(CH_3)_2$, $-C(O)OH$, $-C(O)OCH_2CH_2CH_3$, $-C(O)NHCH_3$, $-C(O)NHCH_2CH_3$, $-C(O)NHCH(CH_3)_2$, $-C(O)NH(cyclopropyl)$, $-C(O)NH(cyclopentyl)$, $-C(O)NHCH(CH_3)(CH_2CH_3)$ or $-C(O)N(CH_3)(cyclopropyl)$.

14. (Original) The compound of Claim 6 wherein:

Z is CR^{31} ; and

R^{31} is independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, $-OR^{32}$, $-SR^{32}$, $-N(R^{33})R^{34}$, $-N(R^{33})S(O)_2R^{23}$; $-N(R^{35})N(R^{33})R^{34}$, $-N(R^{35})N(R^{33})S(O)_2R^{23}$, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted

cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

15. (Original) The compound of Claim 14 wherein:

Z is CR³¹; and

R³¹ is independently selected from a group consisting of optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

16. (Original) The compound of Claim 14 wherein X is O or S(O)_t (where t is 0 to 2).
17. (Original) The compound of Claim 16 wherein R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo; and

R^{30} is selected from the group consisting of hydrogen, halo, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

18. (Original) The compound of Claim 17 wherein said compound is
6-(3,4-difluoro-benzoyl)-5,6-dihydro-4H-thieno[2,3-d] azepine-8-carboxylic acid ethyl ester.
19. (Original) The compound of Claim 16 wherein:
 R^4 and R^5 are each independently hydrogen or halo; and
 R^6 and R^7 are optionally substituted alkyl; or
 R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.
20. (Original) The compound of Claim 19 wherein:
 R^2 is hydrogen, halo or optionally substituted alkyl; and
 R^9 is hydrogen.
21. (Original) The compound of Claim 20 wherein R^{30} is selected from the group consisting of $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$,

$-\text{C}(\text{O})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{C}(\text{S})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$, $-\text{C}(\text{O})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{R}^{34}$,
 $-\text{C}(\text{S})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{R}^{34}$ and $-\text{C}(\text{O})\text{N}(\text{R}^{35})\text{N}(\text{R}^{33})\text{S}(\text{O})_2\text{R}^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

22. (Currently amended) The compound of Claim 21 wherein R^1 is $-\text{C}(\text{O})\text{OCH}_2\text{CH}_3$, $-\text{C}(\text{O})\text{OCH}_3$, $-\text{C}(\text{O})\text{OCH}(\text{CH}_3)_2$, $-\text{C}(\text{O})\text{OH}$, $-\text{C}(\text{O})\text{OCH}_2\text{CH}_2\text{CH}_3$, $-\text{C}(\text{O})\text{NHCH}_3$, $-\text{C}(\text{O})\text{NHCH}_2\text{CH}_3$, $-\text{C}(\text{O})\text{NHCH}(\text{CH}_3)_2$, $-\text{C}(\text{O})\text{NH}(\text{cyclopropyl})$, $-\text{C}(\text{O})\text{NH}(\text{cyclopentyl})$, $-\text{C}(\text{O})\text{NHCH}(\text{CH}_3)(\text{CH}_2\text{CH}_3)$ or $-\text{C}(\text{O})\text{N}(\text{CH}_3)(\text{cyclopropyl})$; and

R^3 is $-\text{C}(\text{O})\text{R}^{10}$ wherein R^{10} is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

23. (Previously presented) The compound of Claim 22 wherein said compound is
6-(3,4-difluoro-benzoyl)-4,4-dimethyl-5,6-dihydro-4H-thieno[2,3-d]azepine-8-carboxylic acid ethyl ester .

24. (Original) The compound of Claim 14 wherein

X is NR^9 ;

R^9 is hydrogen, optionally substituted alkyl, $-\text{C}(\text{O})\text{R}^{18}$ or $-\text{S}(\text{O})_2\text{R}^{23}$; and
 R^{18} and R^{23} each independently optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally

substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl.

25. (Original) The compound of Claim 24 wherein:

R^4 and R^5 are each independently hydrogen or halo; and

R^6 and R^7 are optionally substituted alkyl; or

R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

26. (Original) The compound of Claim 25 wherein:

R^2 is hydrogen, halo or optionally substituted alkyl; and

R^9 is hydrogen.

27. (Original) The compound of Claim 26 wherein R^{30} is selected from the group consisting of $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

28. (Currently amended) The compound of Claim 27 wherein R^1 is $-C(O)OCH_2CH_3$, $-C(O)OCH_3$, $-C(O)OCH(CH_3)_2$, $-C(O)OH$, $-C(O)OCH_2CH_2CH_3$, $-C(O)NHCH_3$, -

C(O)NHCH₂CH₃, -C(O)NHCH(CH₃)₂, -C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl), -C(O)NHCH(CH₃)(CH₂CH₃) or -C(O)N(CH₃)(cyclopropyl); and

R³ is -C(O)R¹⁰ wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

29. (Original) The compound of Claim 28 wherein said compound is selected from the group consisting of:

6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid diethyl ester; and

6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.

30. (Original) The compound of Claim 29 wherein:

R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo; and

R³⁰ is selected from the group consisting of hydrogen, halo, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

31. (Original) The compound of Claim 30 wherein said compound is

6-(3,4-difluoro-benzoyl)-1,4,4-trimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.

32. (Original) The compound of Claim 5 wherein:

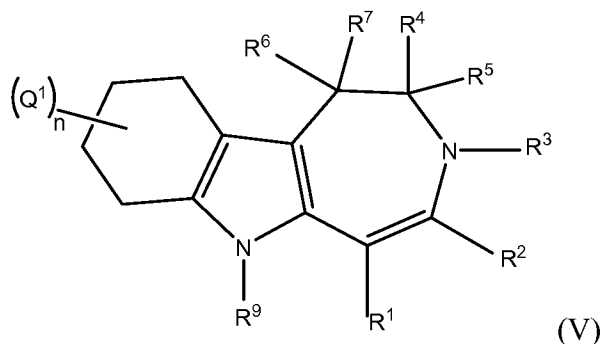
Y is CR³⁰;

Z is CR³¹; and

R³⁰ and R³¹ together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally substituted heteroaryl ring or optionally substituted aryl ring with the exception of substituted or unsubstituted phenyl and substituted or unsubstituted naphthyl.

33. (Original) The compound of claim 32 wherein said optionally substituted cycloalkyl ring is optionally substituted cyclopentyl, optionally substituted cyclohexyl, optionally substituted cycloheptyl or optionally substituted cyclooctyl.

34. (Currently amended) A compound having the formula (V):



or a pharmaceutically acceptable salts, ~~esters, enol ethers, enol esters, acetals, ketals, orthoesters, hemiacetals, hemiketals, acids, and bases, thereof thereof~~, wherein:

n is 0 to 8;

R¹ and R² are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -N(R¹⁵)R¹⁶,

-N(R¹⁵)S(O)₂R²³; -N(R¹⁷)N(R¹⁵)R¹⁶, -N(R¹⁷)N(R¹⁵)S(O)₂R²³, -C(O)R¹⁸, -C(O)OR¹⁴,
 -C(S)OR¹⁴, -C(O)SR¹⁴, -C(O)N(R¹⁵)R¹⁶, -C(O)N(R¹⁵)S(O)₂R²³, -C(O)N(R¹⁵)N=R¹⁶,
 -C(O)N(R¹⁷)N(R¹⁵)R¹⁶ and -C(O)N(R¹⁷)N(R¹⁵)S(O)₂R²³;

R³ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted heteroaralkyl, -C(O)R¹⁰, -C(O)OR¹⁰, -S(O)₂R¹⁰, -C(O)N(R¹¹)R¹², -C(O)N(R¹¹)S(O)₂R²³, -C(O)N(R¹³)N(R¹¹)R¹², -C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)R¹⁰, -N(R¹³)C(O)N(R¹¹)R¹², -N(R¹³)C(O)N(R¹¹)S(O)₂R²³, -N(R¹⁰)C(O)N(R¹³)N(R¹¹)R¹², -N(R¹⁰)C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)OR¹⁰, -P(O)OR¹⁰, or -P(O)(OR¹⁹)OR¹²;

R⁴, R⁵, R⁶ and R⁷ are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -S(O)₂R¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁵)C(O)R²³, -C(O)R¹⁸, -C(O)OR²⁰, -C(O)N(R²¹)R²², -C(O)N(R²¹)S(O)₂R²³, -C(O)N(R²⁴)N(R²¹)R²² and -C(O)N(R²⁴)N(R²¹)S(O)₂R²³; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁶ and R⁷ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁴ and R⁵ are as described above;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted

heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) above;

R²⁰, R²¹, R²² and R²⁴ are selected as in (a) or (b) as follows: (a) R²⁰, R²¹, R²² and R²⁴ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R²¹ and R²², together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R²⁰, R²¹, R²² and R²⁴ are selected as in (a) above;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, and R²⁴, when substituted, are substituted with one or more substituents, each independently selected from Q¹;

each Q¹ is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyno, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl,

aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, $-OR^{70}$, $-SR^{70}$, $-R^{60}-C(J)R^{71}$, $-R^{60}-N(R^{70})C(J)R^{71}$, $-OC(O)R^{71}$, $-R^{60}-N(R^{75})(R^{76})$, $-N^+(R^{77})_3$, $-P(R^{78})_2$, $-P(O)(R^{78})_2$, $-OP(O)(R^{78})_2$, $-N(R^{70})S(O)_2R^{71}$, $-S(O)_2R^{71}$, $-S(O)R^{82}$, $-OS(O)R^{83}$, $-OS(O)_2R^{83}$ or $-Si(R^{83})_3$;

two Q^1 groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q^1 is independently substituted or unsubstituted with one or more substituents each independently selected from Q^2 ;

each Q^2 is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, $-OR^{70}$, $-SR^{70}$, $-R^{60}-C(J)R^{71}$, $-R^{60}-N(R^{70})C(J)R^{71}$, $-OC(O)R^{71}$, $-R^{60}-N(R^{75})(R^{76})$, $-N^+(R^{77})_3$, $-P(R^{78})_2$, $-P(O)(R^{78})_2$, $-OP(O)(R^{78})_2$, $-N(R^{70})S(O)_2R^{71}$, $-S(O)_2R^{71}$, $-S(O)R^{82}$, $-OS(O)R^{83}$, $-OS(O)_2R^{83}$ or $-Si(R^{83})_3$;

two Q^2 groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or $-NR^{70}$;

each R^{60} is independently a direct bond or alkylene;

each R^{70} is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R^{71} is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, $-OR^{72}$ or $-N(R^{73})R^{74}$;

R^{72} , R^{73} and R^{74} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{73} and R^{74} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R^{75} and R^{76} are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclalkyl; or

R^{75} and R^{76} , together with the nitrogen atom to which they are attached, form a heterocycl ring or heteroaryl ring;

each R^{77} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R^{78} is alkyl, heteroaryl, heterocyclyl, aryl, $-OR^{79}$ or $-N(R^{80})R^{81}$;

R^{79} is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R^{80} and R^{81} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{80} and R^{81} , together with the nitrogen atom to which they are attached, form a heterocycl ring or heteroaryl ring;

R^{82} is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or $-OR^{83}$; and

each R^{83} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl.

35. (Original) The compound of Claim 34 wherein:

R^3 is $-C(O)R^{10}$;

wherein R^{10} is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

36. (Original) The compound of Claim 35 wherein:

R^1 is $-C(O)R^{18}$, $-C(O)OR^{14}$ or $-C(O)N(R^{15})R^{16}$, where R^{14} and R^{15} are optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted heterocyclyl, R^{16} is hydrogen, and R^{18} is optionally substituted alkyl.

37. (Original) The compound of Claim 36 wherein:

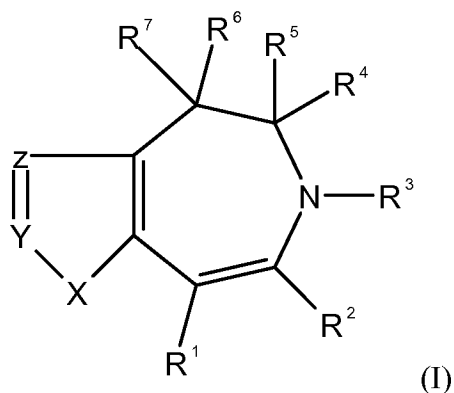
R^2 is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted

heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl or optionally substituted heteroaralkyl.

38. (Original) The compound of Claim 37 wherein:
- R² is hydrogen, halo or optionally substituted alkyl; and
 - R⁹ is hydrogen or optionally substituted alkyl.
39. (Original) The compound of Claim 38 wherein R⁴, R⁵, R⁶ and R⁷ are selected from a), b), c), d), e), f), g) and h) below:
- a) R⁴ and R⁵ are each independently hydrogen or halo and R⁶ and R⁷ are optionally substituted alkyl;
 - b) R⁶ and R⁷ are each independently hydrogen or halo and R⁴ and R⁵ are optionally substituted alkyl;
 - c) R⁴, R⁵, R⁶ and R⁷ are each optionally substituted alkyl;
 - d) R⁴ and R⁵ are each independently hydrogen or halo and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring.
 - e) R⁴ and R⁵ are optionally substituted alkyl and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring
 - f) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R⁶ and R⁷ are each independently hydrogen or halo;
 - g) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R⁶ and R⁷ are optionally substituted alkyl;
 - h) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring; and
 - i) R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo.

40. (Original) The compound of Claim 39 wherein:
R⁴ and R⁵ are each independently hydrogen or halo; and
R⁶ and R⁷ are optionally substituted alkyl; or
R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.
41. (Original) The compound of Claim 40 wherein:
R² is hydrogen, halo or optionally substituted alkyl; and
R⁹ is hydrogen.
42. (Currently amended) The compound of Claim 34 wherein R¹ is -C(O)OCH₂CH₃, -C(O)OCH₃, -C(O)OCH(CH₃)₂, -C(O)OH, -C(O)OCH₂CH₂CH₃, -C(O)NHCH₃, -C(O)NHCH₂CH₃, -C(O)NHCH(CH₃)₂, -C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl), -C(O)NHCH(CH₃)(CH₂CH₃) or -C(O)N(CH₃)(cyclopropyl);
R² is hydrogen, halo or optionally substituted alkyl;
R³ is -C(O)R¹⁰ wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl;
R⁴ and R⁵ are each independently hydrogen or halo; and
R⁶ and R⁷ are optionally substituted alkyl; or
R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring;
R⁹ is hydrogen.
43. (Original) The compound of Claim 42 wherein said compound is
3-(4-fluoro-benzoyl)-1,1-dimethyl-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.
44. (Original) The compound of Claim 39 wherein R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo.
45. (Previously presented) The compound of Claim 44 wherein said compound is
3-(4-fluoro-benzoyl)-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.

46. (Currently amended) A pharmaceutical composition comprising a pharmaceutical carrier or vehicle and a compound having the formula (I):



wherein:

X is NR^9 , O or S(O)_t (where t is 0 to 2);

Y is CR^{30} or N;

Z is CR^{31} or N;

R^{30} and R^{31} are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-\text{OR}^{32}$, $-\text{SR}^{32}$, $-\text{N(R}^{33})\text{R}^{34}$, $-\text{N(R}^{33})\text{S(O)}_2\text{R}^{23}$, $-\text{N(R}^{35})\text{N(R}^{33})\text{R}^{34}$, $-\text{N(R}^{35})\text{N(R}^{33})\text{S(O)}_2\text{R}^{23}$, $-\text{C(O)R}^{36}$, $-\text{C(O)OR}^{32}$, $-\text{C(S)OR}^{32}$, $-\text{C(O)SR}^{32}$, $-\text{C(O)N(R}^{33})\text{R}^{34}$, $-\text{C(S)N(R}^{33})\text{R}^{34}$, $-\text{C(O)N(R}^{33})\text{S(O)}_2\text{R}^{23}$, $-\text{C(S)N(R}^{33})\text{S(O)}_2\text{R}^{23}$, $-\text{C(O)N(R}^{35})\text{N(R}^{33})\text{R}^{34}$, $-\text{C(S)N(R}^{35})\text{N(R}^{33})\text{R}^{34}$ and $-\text{C(O)N(R}^{35})\text{N(R}^{33})\text{S(O)}_2\text{R}^{23}$; or

R^{30} and R^{31} together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally substituted heteroaryl ring, or optionally substituted aryl with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally

substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above,

R¹ and R² are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁷)N(R¹⁵)R¹⁶, -N(R¹⁷)N(R¹⁵)S(O)₂R²³, -C(O)R¹⁸, -C(O)OR¹⁴, -C(S)OR¹⁴, -C(O)SR¹⁴, -C(O)N(R¹⁵)R¹⁶, -C(O)N(R¹⁵)S(O)₂R²³, -C(O)N(R¹⁵)N=R¹⁶, -C(O)N(R¹⁷)N(R¹⁵)R¹⁶ and -C(O)N(R¹⁷)N(R¹⁵)S(O)₂R²³;

R³ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted heteroaralkyl, -C(O)R¹⁰, -C(O)OR¹⁰, -S(O)₂R¹⁰, -C(O)N(R¹¹)R¹², -C(O)N(R¹¹)S(O)₂R²³, -C(O)N(R¹³)N(R¹¹)R¹², -C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)R¹⁰, -N(R¹³)C(O)N(R¹¹)R¹², -N(R¹³)C(O)N(R¹¹)S(O)₂R²³, -N(R¹⁰)C(O)N(R¹³)N(R¹¹)R¹², -N(R¹⁰)C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)OR¹⁰, -P(O)OR¹⁰, or -P(O)(OR¹⁹)OR¹²;

R⁴, R⁵, R⁶ and R⁷ are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -S(O)₂R¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁵)C(O)R²³, -C(O)R¹⁸, -C(O)OR²⁰, -C(O)N(R²¹)R²², -C(O)N(R²¹)S(O)₂R²³, -C(O)N(R²⁴)N(R²¹)R²² and -C(O)N(R²⁴)N(R²¹)S(O)₂R²³; or

R⁶ and R⁷ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁶ and R⁷, together with the

carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁴ and R⁵ are as described above; or

R⁴ and R⁵ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁴ and R⁵, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁶ and R⁷ are as described above; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁴ and R⁵, together with the carbon atom to which they are attached, and R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring or an optionally substituted cycloalkenyl ring;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸, -C(O)OR²⁰ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) above;

R^{20} , R^{21} , R^{22} and R^{24} are selected as in (a) or (b) as follows: (a) R^{20} , R^{21} , R^{22} and R^{24} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{21} and R^{22} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{20} , R^{24} and R^{22} are selected as in (a) above;

R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of $R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22}, R^{23}$, and R^{24} and $R^{30}, R^{31}, R^{32}, R^{33}, R^{34}, R^{35}$ and R^{36} ~~R^1, R^{24} and R^{30}, R^{36}~~ , when substituted, are substituted with one or more substituents, each independently selected from Q^1 ;

each Q^1 is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyno, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, $-OR^{70}$, $-SR^{70}$, $-R^{60}-C(J)R^{71}$, $-R^{60}-N(R^{70})C(J)R^{71}$, $-OC(O)R^{71}$, $-R^{60}-N(R^{75})(R^{76})$, ~~$-N^+(R^{77})_3$~~ , $-P(R^{78})_2$, $-P(O)(R^{78})_2$, $-OP(O)(R^{78})_2$, $-N(R^{70})S(O)_2R^{71}$, $-S(O)_2R^{71}$, $-S(O)R^{82}$, $-OS(O)R^{83}$, $-OS(O)_2R^{83}$ or $-Si(R^{83})_3$;

two Q^1 groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q^1 is independently substituted or unsubstituted with one or more substituents each independently selected from Q^2 ;

each Q^2 is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyno, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double

bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), ~~N⁺(R⁷⁷)₃~~, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q² groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR⁷⁰;

each R⁶⁰ is independently a direct bond or alkylene;

each R⁷⁰ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R⁷¹ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, -OR⁷² or -N(R⁷³)R⁷⁴;

R⁷², R⁷³ and R⁷⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁷³ and R⁷⁴, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁷⁵ and R⁷⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

R⁷⁵ and R⁷⁶, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

each R⁷⁷ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁷⁸ is alkyl, heteroaryl, heterocyclyl, aryl, -OR⁷⁹ or -N(R⁸⁰)R⁸¹;

R⁷⁹ is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁸⁰ and R⁸¹ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{80} and R^{81} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R^{82} is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or $-OR^{83}$; and

each R^{83} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; or as a pharmaceutically acceptable salt thereof.

47. (Canceled)

48. (Previously presented) A method of treating or ameliorating one or more symptoms of a disease or disorder wherein the disease or disorder is selected from hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, dyslipidemia, lipodystrophy, atherosclerosis, atherosclerotic disease, atherosclerotic disease events, atherosclerotic cardiovascular disease, Syndrome X, diabetes mellitus, type II diabetes, insulin insensitivity, hyperglycemia, cholestasis and obesity comprising administering to a subject in need thereof an effective amount of a compound or composition of any one claims 1-46.